

SECTION G - MISCELLANEOUS STRUCTURE

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SECTION G - MISCELLANEOUS STRUCTURES

I. INTRODUCTION

A wide variety of miscellaneous structures have been designed for individual site conditions. Several that lend themselves to repeated use are included for consideration by the designer.

II. WATER LEVEL GAGE

Both the treated timber and the steel water level gage, are set flush with the upstream surface of the embankment. Elevation or stage markings should be delayed until the initial embankment settlement has taken place.

III. INTAKE STRUCTURE

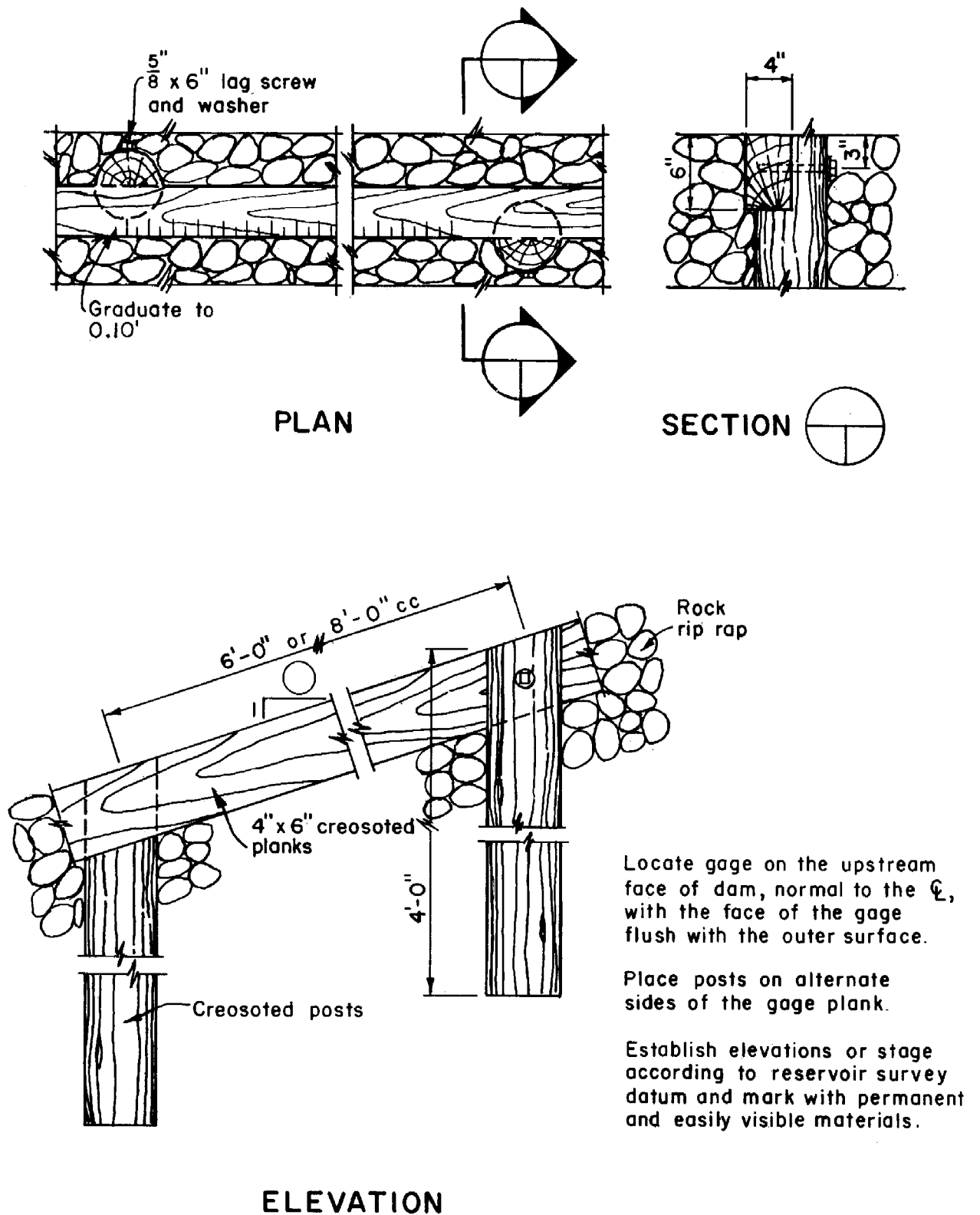
The pylon type gate lift (Figure G-3) is not recommended for conditions where icing is severe. Access to the pylon is by boat during most reservoir stage.

IV. TIMBER CATWALK

This installation is not recommended for conditions where icing is severe. Figure G-4 provides a fast approximate cost used for alternate comparison. Although the catwalk width is only 2 feet, the basic data will allow for width increase more desirable for recreational purposes. See Figure H-3 for typical layout detail for the construction drawing. A handrail is recommended and can be added by extending the decking at about 8 foot centers to provide brace support for the handrail posts.

V. INLET-OUTLET BOX

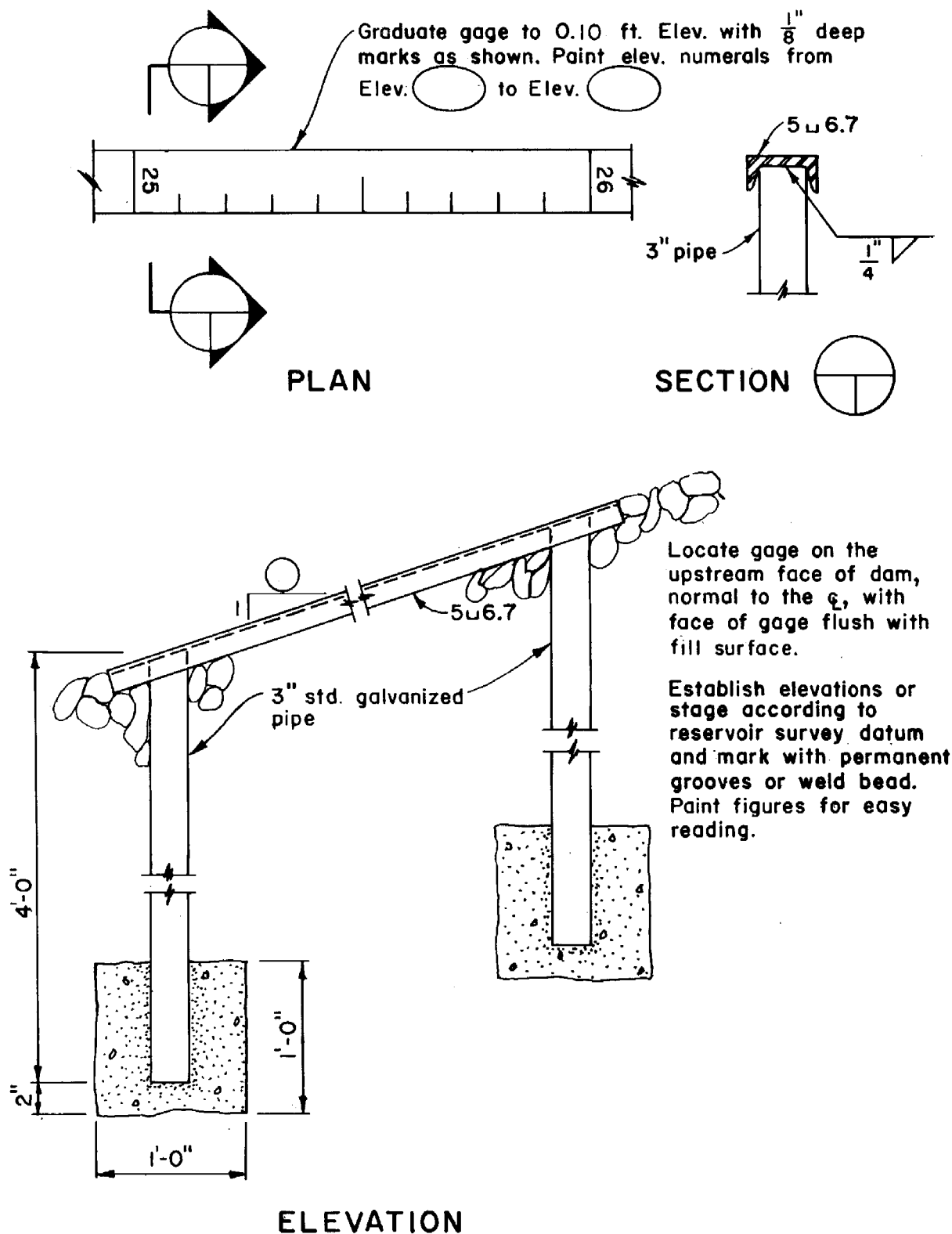
Figures G-5 and G-6 provide both details and proportions for a small reservoir inlet-outlet box. The reservoir is filled by pumping during off peak periods. A combination of pumping and reservoir discharge can be used for peak requirements.



WATER LEVEL GAGE

FIGURE G-1
RESERVOIR
WATER LEVEL GAGE

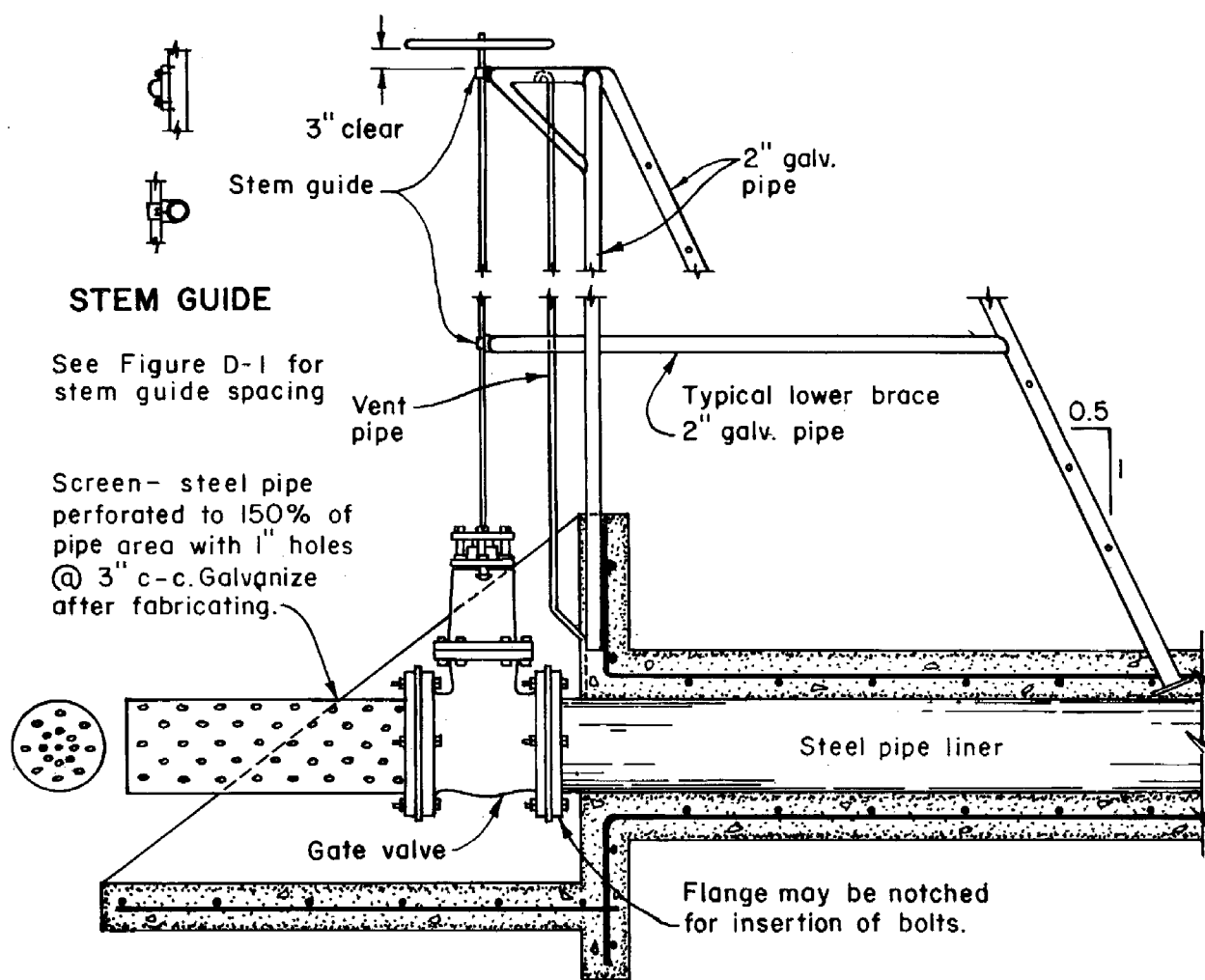
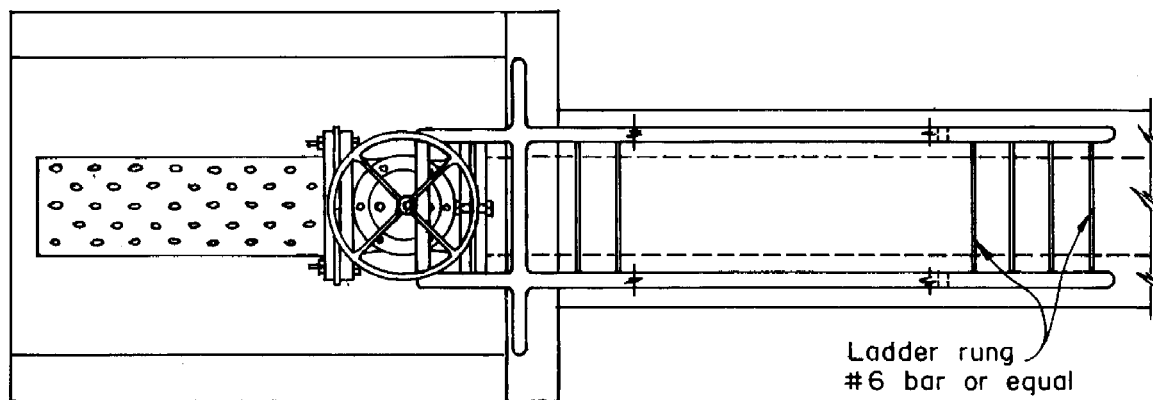
EWP Unit Portland, Oregon



WATER LEVEL GAGE

FIGURE G-2
RESERVOIR
WATER LEVEL GAGE

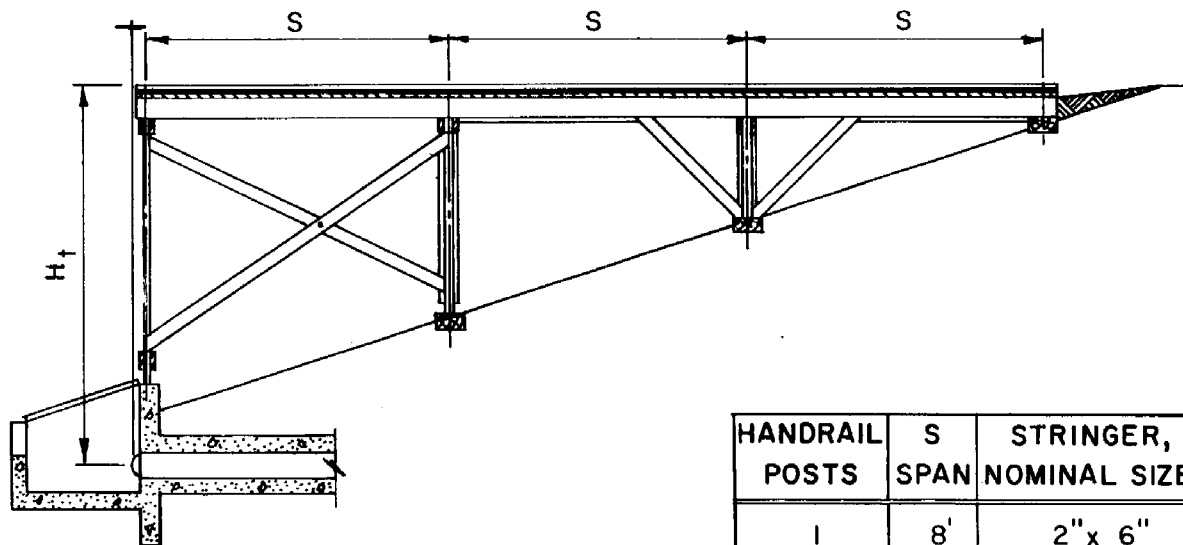
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ELEVATION

FIGURE G-3
INLET STRUCTURE
WITH STRAINER AND PYLON GATE LIFT

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Notes:

1. Multiple story bents to be used for heights in excess of 14'-0".
2. Costs do not include mechanical features of the gate system.
3. Allowable working stress, $f=1200$ p.s.i.
4. Timber quantity includes substructure and deck.

| HANDRAIL POSTS | S SPAN | STRINGER, NOMINAL SIZE |
|----------------|--------|------------------------|
| 1 | 8' | 2" x 6" |
| 2 | 10 | 2 x 8 |
| 2 | 12 | 2 x 10 |
| 2 | 14 | 2 x 12 |
| 2 | 16 | 2 x 12 |
| 3 | 18 | 3 x 12 |
| 3 | 20 | 3 x 12 |

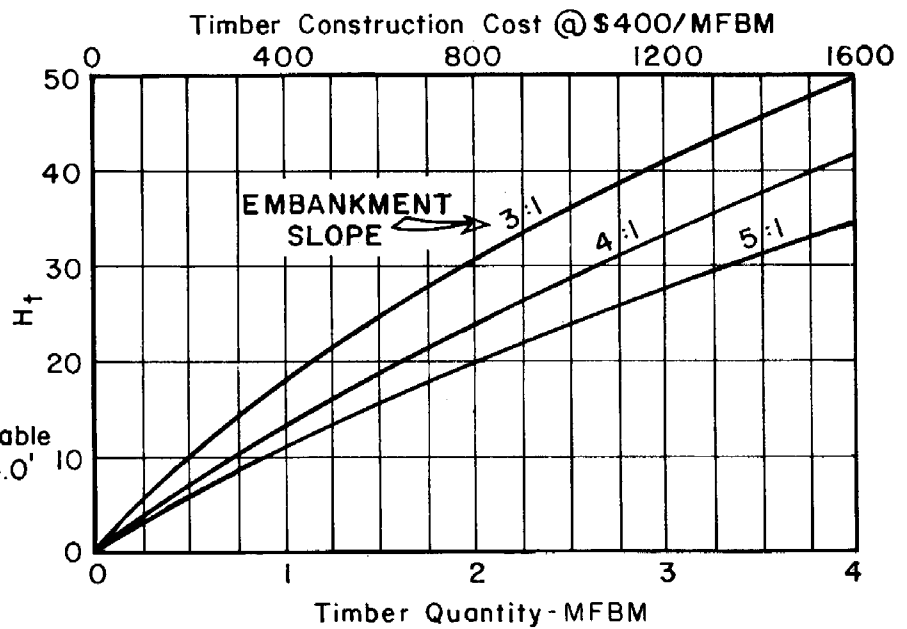
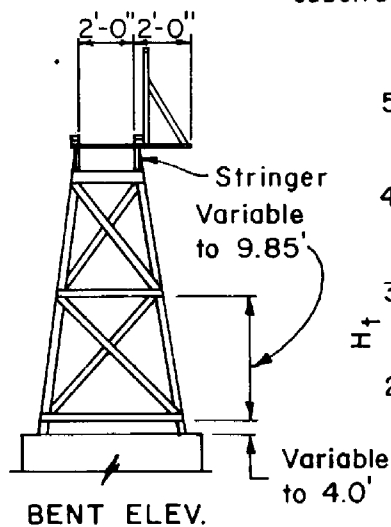


FIGURE G-4
TIMBER CATWALK:
STRINGER SIZE, AND COST

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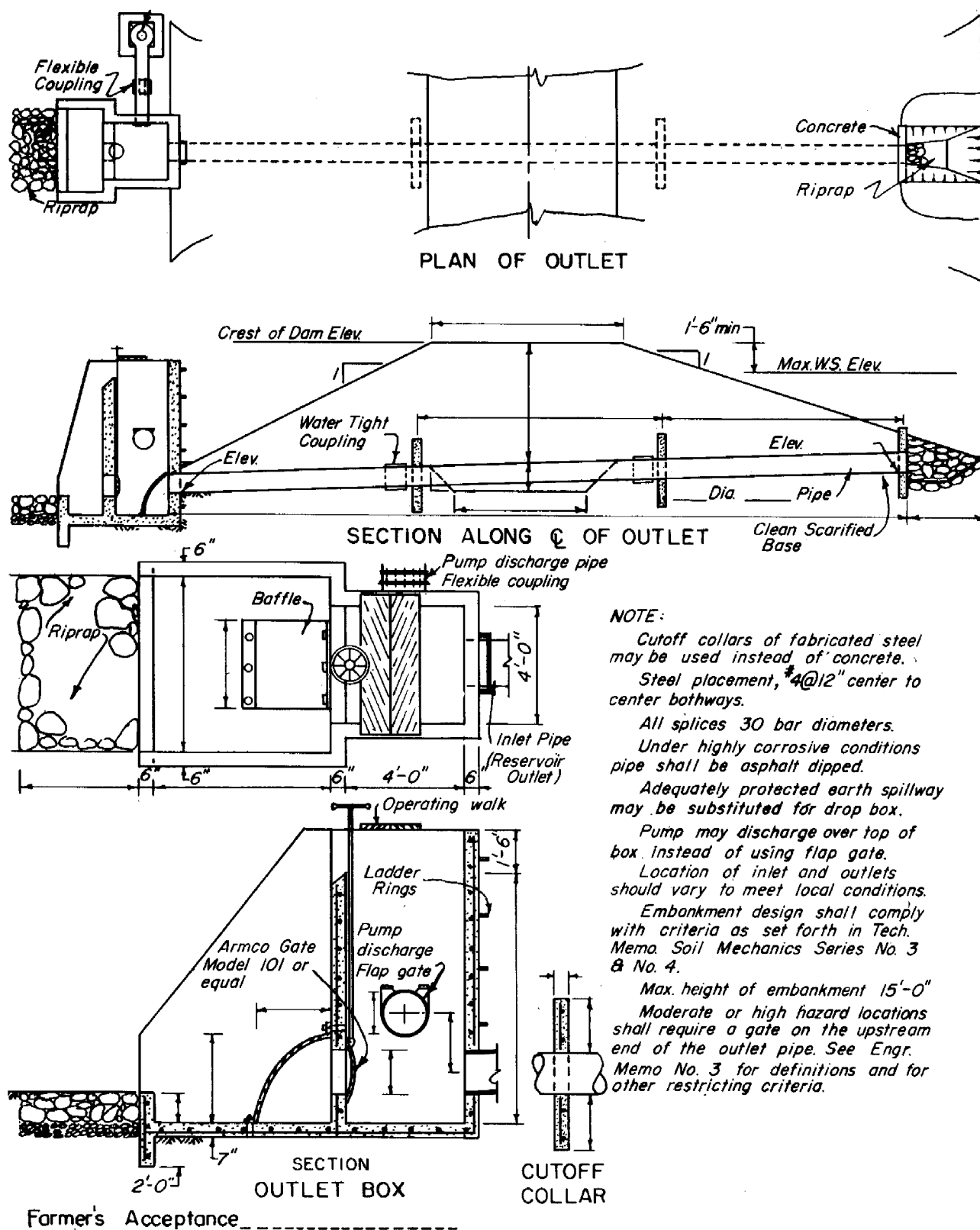


FIGURE G-5
OVERNIGHT STORAGE RESERVOIR
INLET-OUTLET BOX

REFERENCE:
7-L-20090

EWP Unit Portland, Oregon

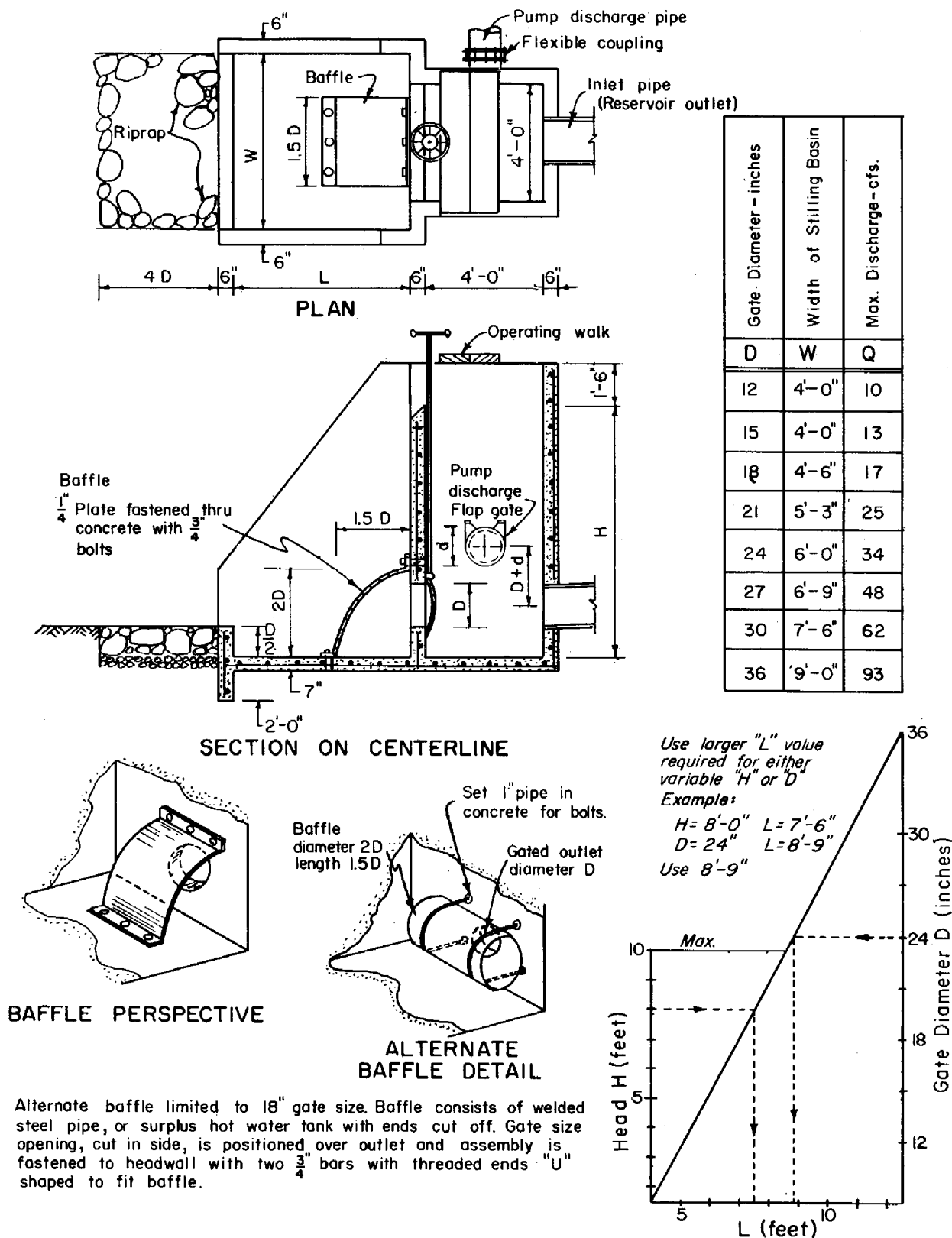


FIGURE G-6
OVERNIGHT STORAGE RESERVOIR
INLET-OUTLET BOX
EWP Unit, Portland, Oregon

REFERENCE:
7-L-20090